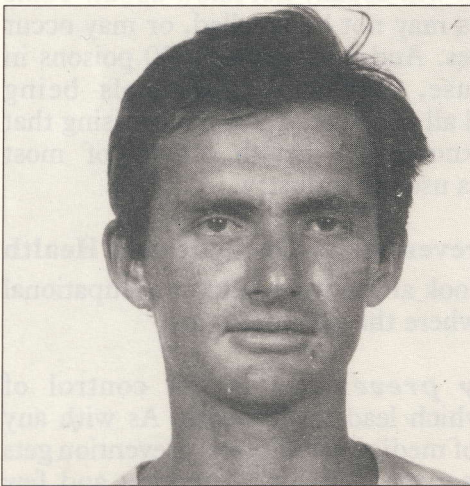


The General Practitioner's role in Occupational Health

— O M Bachmann



Dr O M Bachmann, MChB
Industrial Health Research Group
Department of Sociology
University of Cape Town
Rondebosch 7700.

Curriculum vitae

Dr O M Bachmann has worked as a general practitioner in Walvis Bay and Windhoek, and has had homeland hospital practice in Kwa Zulu. He is presently Research Officer for the Industrial Health Research Group, which is an independent service organisation based at the University of Cape Town, conducting research into occupational health and safety in South Africa, and providing a consultancy service on request from democratic trade unions. Dr Bachmann's special interest in practice, is Preventive and promotive health measures that involve and empower communities, specifically occupational health in the context of industrial relations and employee participation. In research, he is interested in Occupational epidemiology and workers' compensation.

Most adult patients that a general practitioner sees are employed. They are therefore exposed to conditions at work that may impair their health. As few enterprises provide their own health services, GPs are the most important group providing health care to workers. Some will do sessions at factories, but

Summary

Occupational health is a broad discipline and GPs are not being prepared to recognise the issues involved. Occupational health problems are often complex, requiring interventions at many levels outside of the consulting rooms or clinic.

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most treat workers as individuals in their consulting rooms. Occupational health problems are often complex, requiring interventions at many levels outside of the consulting rooms or clinic. However, little undergraduate training is provided in the field, and occupational issues are rarely covered in the general medical literature. Of course, many doctors do provide excellent comprehensive care to workers, and I shall not presume to prescribe to them. I shall try here to highlight some of the important areas that doctors should bear in mind while delivering health care to workers.

How many people get sick from their work?

In 1976 the Erasmus Commission of Enquiry into Occupational Health published startling estimates of how many people are exposed to hazardous substances at work.¹ They found, for example, that almost 600 000 workers are potentially

Note: This article is based on a talk given to members of the Academy of Family Practice and the National Medical and Dental Association on 24 August 1988.

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exposed to ammonia (a respiratory irritant), another 600 000 to benzene (which can cause leukaemia), another 600 000 to noise at levels which can cause hearing loss, 158 000 to lead and 150 000 to pesticides in industry. The list continues, and the numbers exposed have probably increased in the last 12 years. But we do not see corresponding reports of occupational diseases. The latest available Workmen's Compensation statistics (for 1984) reported that of 268 539 claims handled, 22 100 were for permanent disablement and 1 691 were for deaths.² Virtually all of these were for accidents, with only a very small percentage for diseases. Of course, some exposures are more intense than others, and not all of those exposed will develop diseases. Also, occupational disease statistics are not collected consistently. But the main reason we hear so little of occupational diseases is not because they are not there, but because they are not recognised.

Occupational issues are rarely covered in general medical literature

Why are occupational diseases so difficult to diagnose?

Even the most experienced occupational physician may be unable to distinguish an illness caused by working conditions from diseases due to other causes. The following principles may be useful in diagnosing occupational diseases.³

1. They have multiple interrelated causes. This means that they may often be plausibly ascribed to something outside of work, and occupational conditions are not given the importance they deserve, if they are considered at all. For example, respiratory impairment may be attributed to the effects of smoking, when in fact dust exposure and smoking may have combined to cause lung disease. Combined effects can either be additive, or "more than the sum of the parts".
2. The signs and symptoms of occupational diseases are often the same as those of non-occupational diseases. For example, occupational dermatitis or asthma are usually clinically indistinguishable from asthma and dermatitis found in the general population.
3. Many occupational diseases have a latent

interval between the beginning of exposure and the onset of symptoms, sometimes taking twenty or thirty years. Cancers and pneumoconioses are examples. This means the causative exposure may be forgotten, or not thought of.

4. Exposure may be difficult to ascertain. A single job title does not help much, as it could mean exposure to many different substances, which the patient will usually not know about. Toxic substances may not be labelled, or may occur in mixtures. And with over 20 000 poisons in regular use, and more chemicals being developed all the time, it is not surprising that nobody knows the health effects of most substances used in industry.

Levels of prevention in Occupational Health

Let us now look at the wide field of occupational health, and where the GP comes in.

1. Primary prevention is the control of conditions which lead to ill health. As with any other group of medical conditions, prevention gets a lot of lip service, but little attention and few resources are devoted to it. Prevention is particularly important in occupational health, as many occupational diseases are not treatable, but are amenable to control.

When the hazardous process or substance is identified there are a number of ways of controlling it.

- (i) *Substitution* entails the replacement of a substance or process with a less harmful one. For example, asbestos can be replaced by other materials.
- (ii) *Enclosure* means sealing off sources of, for example, dusts, chemicals, heat or excessive noise.
- (iii) *Ventilation* is essential in removing airborne substances such as dusts or gases from the air that workers breathe.
- (iv) *Machine guarding* can prevent workers from getting their limbs or clothes caught in moving machinery.
- (v) *Personal protective equipment* such as masks, goggles, gloves or ear muffs can protect the worker, but as the equipment is often uncomfortable, it is frequently not used properly, and is a poor substitute for environmental controls.

This is not a complete list, but does illustrate

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that prevention is possible. It is not the GP's job to know all the details of what control measures are available or appropriate, but when one diagnoses an occupational disease or accident one should remember that:

- (i) treatment is unlikely to be of use if the worker remains exposed to the cause,
- (ii) there may still be many other workers exposed to the same hazards,
- (iii) many of the conditions that have caused the patient's disease are controllable,
- (iv) the lack of control that exists may be just because nobody knows that the condition is impairing workers' health, and
- (v) it is therefore one's responsibility to follow up the problem with those who may be able to bring about that control.

2. Secondary prevention entails prevention of progression of disease through early detection and treatment of diseases, before they progress to irreparable damage. Doctors' lack of awareness of occupational conditions is probably the greatest

barrier to correct diagnosis and treatment. The first step in diagnosis is the *history*, and this is where doctors most often err. How many ask "What is your job?" as part of a routine consultation? That simple question will elicit a lot of information. If the answer to the question, or subsequent findings during the consultation, arouse one's suspicions, one should enquire about the details of the patient's job, and about previous

We hear so little about occupational diseases because they are not diagnosed

jobs. So many South Africans have worked on the mines, that any case of chronic respiratory illness deserves an occupational history. Dermatitis, deafness and nervous system diseases also deserve a history of past and present jobs.

Physical examination may or may not be helpful. Distribution of dermatitis may give clues and



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crepitations may be an early sign of asbestosis, but for many diseases we have to go on to *special investigations*. Essential information may be provided by lung function testing and chest x-rays for chronic lung diseases, audiometry for deafness, patch testing for dermatitis, urine and blood tests for various kidney and liver conditions and specific neurological tests for nervous system conditions. GPs should know what tests are likely to be useful and to whom to refer patients for testing.

These tests can also be useful in *screening* workers, so as to detect diseases before they become symptomatic, and to make early corrective measures. Screening should be done among populations of workers known to be exposed to hazardous processes. But screening is no panacea — insensitive or inappropriate tests can instill a false sense of security. For example, spirometry alone is a poor screening test for pneumoconioses — by the time lung function is impaired the disease will be in an advanced stage. X-rays would be more useful. Also, poorly administered tests

can give false results. So screening tests must be selected and administered with care. Once the diagnosis is made, some occupational diseases may respond to *treatment*, but others like pneumoconioses are irreversible. Affected workers should be removed from exposure, ideally getting other jobs with the same business. However, they may end up being fired, so the GP should discuss this with them before notifying their employers.

3. Tertiary prevention concerns rehabilitation or the prevention of progression of disability. This is the realm of the physiotherapist, occupational therapist and social worker, but also of the employer who can retrain a worker for work in a different environment to the one which caused the disease. Once again the GP should know what rehabilitation modalities may be of use, what are available, and to whom to refer. It should also be remembered that workers' compensation will pay for rehabilitation, but this important benefit is often neglected by doctors. However, the lack of available resources, and the ease with which



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employers may fire disabled workers rather than retrain them for safer jobs, makes prevention, early detection and treatment all the more important.

Workers' compensation is a very important issue for disabled workers, and doctors need to know how to use the complex and problematic system so as to derive the maximum benefit for their patients.⁴ Compensation forms must be completed meticulously and promptly and sent to the right compensation authority. Where a doctor is asked to assess the degree of "disablement", it should be borne in mind that disability refers to the patient's overall social functioning, including ability to earn an income, and is different to impairment, which refers only to loss of physical function. The patient may not be aware of his or her right to compensation, and should be informed of this. One should also enquire whether the patient's employer or trade union is assisting with the compensation claim. If not, one should try to find someone who can assist. Advice offices, social workers and service organisations assisting

unions may also have experience with compensation. It must be remembered that the aim of compensation is not only to pay medical costs, but to replace some of the workers' lost earnings.

Ethical consideration

Ethical codes have been developed by professions to "indicate to their members and to society that they accept responsibility for the regulation of their professional practice and behaviour".⁵ These codes vary, but some principles have stood the test of time and have been adopted in very different societies. As occupational medicine is often practiced in a conflictual context, ethics take on particular importance. Some contentious areas are explored below.⁶

1. Loyalty

The doctor-patient relationship should not change in the workplace setting, even if the doctor is employed by management. The interests of the patient continue to be of primary importance.



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2. Confidentiality

If patients are to disclose all the information that is of relevance to the case, it is essential that they have confidence that any information shared with the doctor is secret. Doctors employed by management (or a union) may feel that the employer (or union) needs to know everything about the health of the workers. Disclosure of this information without the consent of the worker is a serious breach of ethics. Consent for disclosure should be given freely, without coercion. Management or worker representatives are entitled to know summary results indicating the health of the workforce. Employers are also entitled to know whether, according to pre-

How many GPs ask "What is your job?" – as part of a routine consultation

employment or periodic examinations, the worker is (i) fit for work, (ii) not fit for work, or (iii) fit for restricted work. Medical records in the workplace should be kept in the clinic, and available only to clinic staff; they should not be kept in the general administration area where they could be seen by unauthorised persons. The only time a doctor may be forced to breach confidentiality against the worker's interests, is if the worker's health is a danger to others, for example if a bus driver is an uncontrolled epileptic. This decision should not be taken lightly.

Employers may fire disabled workers more easily rather than retrain them for safer jobs

3. Disclosure

The patient should be informed of the doctor's findings, and of test results, even if language differences make this difficult. If workers request access to their medical records or screening results, this must be provided. Similarly if they give consent for another doctor to have access to the records, this should be allowed. If it appears that uncontrolled conditions are impairing the workers' health, those parties which may have a role in controlling the hazard — the employer,

union or factory inspectorate — should be informed, provided consent is obtained.

The possible results of this notification should be discussed with the worker.

4. Screening examinations

Screening examinations done before a worker begins employment, and periodically thereafter, may be helpful in protecting hypersusceptible workers, detecting adverse health effects, and identifying workplace hazards. However, they may be used by management to "weed out the sickly", sometimes on dubious grounds. Workers are often suspicious of these examinations, and may understandably fake test results or withhold information so as to not lose their jobs, thus negating the potential benefit the screenings may provide. The doctor supervising the screening should be certain that the screening method is medically sound and he or she knows the work process well enough to be able to judge whether the worker is fit for employment.

5. Competence

The six years of training that lead to a medical degree provide a theoretical foundation for

The doctor-patient relationship should not change in a workplace setting even if the doctor is employed by management

practice as a "basic doctor". There is, however, little undergraduate training in occupational health. Doctors treating workers should attempt to increase their knowledge of the field. Even a short textbook may provide much valuable information, and one can go on to part time study towards a Diploma in Occupational Health at any one of a number of medical schools in South Africa. Most medical school libraries have a range of literature on occupational health. As with any other field of medicine, the GP needs to know his or her limitations, and when to refer patients — an increased knowledge of the field will reduce the need to refer.

Conclusion

Occupational health is not a narrow speciality. Rather, it is a broad discipline, which needs to take into account the very different spheres of influence surrounding the patient. To keep one's

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horizons within the consulting room, while thinking of which drug to prescribe, is to scratch the surface of the patient's problem. Comprehensive care of workers along the lines I have mentioned need not mean a much greater workload, especially if one can utilise others with experience in the field. But it can make the health care of workers much more useful, interesting and rewarding, as well as giving one's patients the care they expect from a GP.

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